REMARKS

Claims 23-51 are now pending in the application. Minor amendments have been made to the specification and claims to simply overcome the objections to the specification and rejections of the claims under 35 U.S.C. § 112. The amendments to the claims contained herein are of equivalent scope as originally filed and, thus, are not a narrowing amendment. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

SPECIFICATION

The specification stands objected to for certain informalities. Specifically, the Examiner objects to the specification as failing to provide proper antecedent basis for the limitations recited in claims 23, 37, 45 and 46 and the term "about" in front of the sugar amount in claim 26.

The subject matter recited in claim 23 was included with the application as originally filed and thus forms a part of the original specification. Accordingly, Applicant has amended the specification to include the subject matter recited therein. Applicant has also made minor amendments to paragraphs 28-30 to correct certain typographical errors.

As to the limitations recited in claims 37, 45 and 46, Applicant directs the Examiner's attention to the last sentence in paragraph 22 of the application as originally filed wherein the formulation of the reprocessed batter is indicated as being approximately 60% original rework, 30% water and approximately 4% catalyst. Applicant submits that this disclosure supports the ratios recited in the subject claims. In view of the foregoing,

Applicant respectfully requests the Examiner to reconsider and withdraw the objection to the specification.

REJECTION UNDER 35 U.S.C. § 112

Claims 27, 28, 32, 33, 38-40, 44, 47-48 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claims 27, 28, 32, 33, 39, 40, 47 and 48 are all directed to the composition of the catalyst utilized in the reprocessed batter. Applicant directs the Examiner's attention to paragraph 23 which sets forth various catalyst compositions in accordance with the present invention. Applicant submits that this disclosure describes the invention in such a way as to reasonably convey to one skilled in the relevant art that the inventor at the time the application was filed had possession of the claimed invention.

Specifically, with respect to claims 27, 32, 39 and 47, Applicant notes that the recited composition results from the combined consideration of the sugar and the dextrose which can be generically considered together as a sugar. In this regard, Applicant notes that table sugar (aka sucrose) is a disaccharide. Likewise, dextrose is a simple monosaccharide sugar (aka glucose). See attached printouts from Wikipedia.com. In addition, the carrier described in the preferred embodiment as flour or soy which is an inert or non-essential ingredient to the catalyst, has been omitted from the recited composition. Similarly, with respect to claims 28, 33, 40 and 48, Applicant submits that the further recitation of the sugar as comprising about 75% sucrose and about 25% dextrose is supported by the disclosure in paragraph 23.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection under Section 112, first paragraph.

REJECTION UNDER 35 U.S.C. § 103

The Examiner has rejected claims 23, 24 and 38 under 35 U.S.C. § 103(a) as being unpatentable over Moline (U.S. Pat. No. 4,046,920) in view of Silva (U.S. Pat. No. 4,500,548). This rejection is respectfully traversed.

As the Examiner notes, Moline does disclose a scrap feedback system in which approximately 30% of the dough web becomes scrap which is subsequently reintroduced into a dough mix. However, Moline does not disclose the re-use of dough scraps in the mixed dough at a level of 30%. Moreover, Moline fails to teach or suggest the formation of a reprocessing batter which includes the rework, water and a catalyst. Rather, Moline utilizes a metering extruder to form a ribbon of dough from the scraps which is introduced directly into the dough mixture. As such, Moline is not unlike the prior art described in the background of invention in this present application, and further contemplates the need to carefully meter the amount of dough scrap in a controllable and known proportion so as not to adversely affect the quality of the dough.

Applicant submits that Silva fails to provide the teaching missing from Moline, namely the formation of a reprocessing batter by combining the rework with a catalyst and water in amounts such that substantially all of the rework yeast content is naturally expired. Rather, Silva teaches adding a fermentation aid made of fresh ingredients to a new dough, thereby reducing the fermentation time of the new dough without sacrificing the standard bread characteristics. As such, the fermentation aid of Silva does not

teach or suggest the use of a catalyst and water in combination with the rework dough to obtain the natural expiration of the yeast in the rework dough. Furthermore, Applicant submits that the fermentation aid of Silva fails to teach the inclusion of wheat gluten therein.

In view of the deficiencies of the teachings of Moline in combination with Silva, Applicant submits that the Examiner has failed to present a prima-facie case of obviousness with respect to claims 23, 24 and 38. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection under Section 103.

ALLOWABLE SUBJECT MATTER

The Examiner notes that claims 25, 26 and 29 would be allowable if rewritten in independent form. Applicant gratefully acknowledges this indication; however, in view of the foregoing amendments and remarks Applicant has not opted to rewrite these claims at this time.

DOUBLE PATENTING REJECTION

The Examiner has rejected claims 45-51 under the judicially created doctrine obviousness type double patenting as being unpatentable over claims 14-21 of U.S. Patent No. 6,743,457. The Examiner notes that the pending claims are not identical to the patented claims but states that "they are not patentably distinct from each other because both the patent and the instant application are directed to a reprocessed batter comprising rework dough, water and a catalyst." In the interest of expediting prosecution of this application, Applicant submits herewith a terminal disclaimer and the requisite fee in

compliance with 1.321(c) for overcoming the Examiner's non-statutory double patenting rejection.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: October 12, 2004

By: _____
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Sucrose

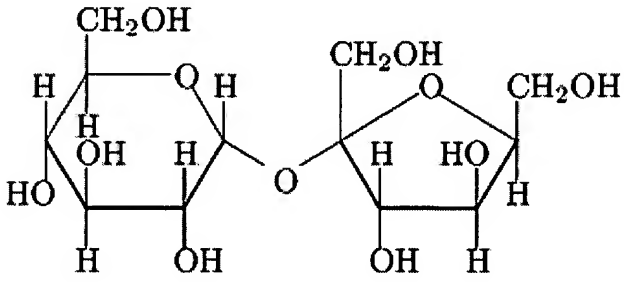
From Wikipedia, the free encyclopedia.

Sucrose ($C_{12}H_{22}O_{11}$) is the chemical name of **table sugar**. Sucrose is a disaccharide; each molecule consists of two "simple" sugars (a glucose and a fructose), called monosaccharides. sucrose is also the T-formula of glucose, $C_6H_{12}O_6$.

Contents

Composition

Sucrose is a disaccharide composed of one molecule of glucose connected via an α(1-2) glycosidic bond to one molecule of fructose.



Production

Sucrose is generally extracted from sugar cane or sugar beet and then purified and crystallized. Other (minor) commercial sources are sorghum and sugar maples.

Usage

Pure sucrose is the most common sweetener in the modern, industrialized world. People, and in fact most other mammals except members of the cat family, will gladly accept a food sweetened with sucrose, even if they aren't hungry. Processed food and junk food often have sucrose added.

Health effects

Sucrose has several adverse health effects. The most common is tooth decay, in which bacteria in the mouth turn sucrose into acid that attacks tooth enamel. Sucrose has a high calorie content and is also believed to cause obesity. People with diabetes mellitus need to control their intake of sucrose.

Sugar substitutes

Because of the health effects of sucrose, several substitutes have been developed, although none appear today as sugar in cooking and they may have other health consequences.

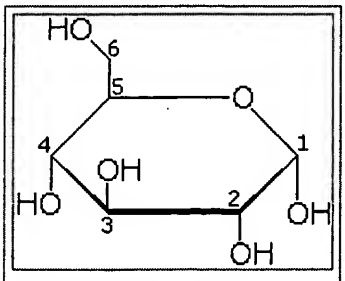
Misc

- Solubility in water: about 2.1g sucrose / 1g water (at 25°C). source (*http://www.science.edu.sg/ssc/detailed.jsp?artid=2382&type=6&root=5&parent=5&cat=53*)

Glucose

From Wikipedia, the free encyclopedia.

Glucose, a simple monosaccharide sugar, is one of the most important carbohydrates and is used as a source of energy in animals and plants. Glucose is one of the main products of photosynthesis and starts respiration. The natural form (D-glucose) is also referred to as **dextrose**, especially in the food industry.



A Haworth projection representation of the structure of glucose (α-D-glucopyranose)

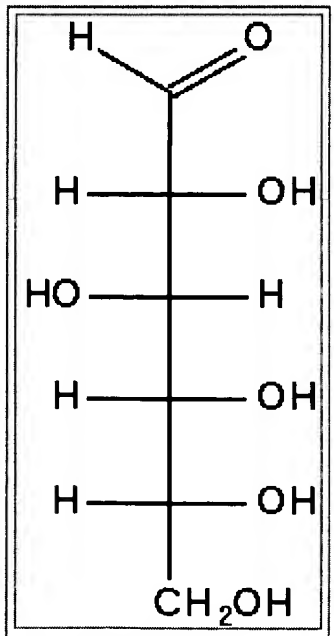
Glucose ($C_6H_{12}O_6$, molecular weight 180.18) is a hexose -- a monosaccharide containing six carbon atoms. Glucose is an aldehyde (contains a -CHO group). Five of the carbons plus an oxygen atom form a loop called a "pyranose ring", the most stable form for six-carbon aldoses. In this ring, each carbon is linked to hydroxyl and hydrogen side groups with the exception of the fifth atom, which links to a 6th carbon atom outside the ring, forming a CH_2OH group. This ring structure exists in equilibrium with a more reactive acyclic form, which makes up 0.0026% at pH 7.

Glucose is a ubiquitous fuel in biology. We can speculate on the reasons why glucose, and not another monosaccharide such as fructose, is so widely used. Glucose can form from formaldehyde under abiotic conditions, so it may well have been available to primitive biochemical systems. Probably more important to advanced life is the low tendency of glucose, by comparison to other hexose sugars, to nonspecifically react with the amino groups of proteins. This reaction (glycosylation) reduces or destroys the function of many enzymes. The low rate of glycosylation is due to glucose's preference for the less reactive cyclic isomer. Nevertheless, many of the long-term complications of diabetes, blindness, kidney failure and peripheral neuropathy for example, are probably due to the glycosylation of proteins.

In respiration, through a series of enzyme-catalysed reactions, glucose is oxidized to eventually to form carbon dioxide and water, yielding energy, mostly in the form of ATP.

Chemically joined together, glucose and fructose form sucrose. Starch, cellulose, and glycogen are common glucose polymers (polysaccharides).

The older name dextrose arose because a solution of D-glucose rotates polarised light towards the right. In the same vein D-fructose was called "levulose" because a solution of levulose rotates polarised light to the left.



The chain form of D-Glucose

Isomerism

There are two enantiomers (mirror-image isomers) of the sugar -- D-glucose and L-glucose, but in living organisms only the D-isomer is found. The ring structure may form in two different ways, yielding α (alpha) glucose and β (beta) glucose. Structurally, they differ in the orientation of the hydroxyl group linked to the first carbon in the ring. The α form has the hydroxyl group "below" the hydrogen (as the molecule is conventionally drawn, as in the figure above), while the β form has the hydroxyl group "above" the hydrogen. These two forms interconvert on a timescale of hours in aqueous solution, to a ratio of α:β 36:64, in a process called *mutarotation*.

D-Glucose has the same configuration at its penultimate carbon as D-glyceraldehyde.

Synthesis

1. The product of photosynthesis in plants and some prokaryotes.
2. Formed in the liver by the breakdown of glycogen stores (Glucose polymers).
3. Synthesized in liver and kidneys from intermediates.

External links

10/11/2004